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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,236	09/15/2003	Eric J. Larsen	SONYP029	3753

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EXAMINER

OMOTOSHO, EMMANUEL

ART UNIT PAPER NUMBER

3714

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/663,236	LARSEN ET AL.	
	Examiner	Art Unit	
	Emmanuel Omotosho	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/15/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date
:2/10/04,3/15/04,7/02/04,3/21/05.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oishi et al. U.S. Patent 6,890,262 in view of Frey International application WO 99/35633. Oishi discloses all of the subject matters with the exception of using a view frustum to change the point of view for a video scene based on object positional information. However, as can be seen from figures 1, 5A-D and Column 1 lines 55-65, the concept of a video scene reacting to the (left, right, up and down) movements of a marker-less object captured through a camera has been taught. Moreover, In regards to claims 28-45, the concept of supplying, via a computer readable medium, computer program instructions that relates to the method of a user interacting with a video clip through the use of a camera has been taught in Column 4 lines 1-15.

3. In regards to Claim 1,5,6,7,8 Oishi et al. teaches the concept of identifying the user's head, tracking the change in position of the user's head, which in effect interacts with the video clip being displayed. Oishi et al. also teaches a system comprising a method that changes the view of the scene in the displayed

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video clip when the system detects a movement from the head of the user (See Column 3 lines 53-67). Where the initial setup for the system includes capturing a face template for the user's head (See Column 6, lines 1-20, Fig 6). Where each frame of the video clip is processed based on the movement of user's head (See Column 6 lines 21-29, Fig 4a-4d).

4. In regards to Claim 9-11 Oishi et al. teaches using any digital camera as the image capturing means to interact with the video game (See Column 5 lines 43-48). Where the method for tracking the image being captured by the camera (the user's head) is independent of the user's hand held control (See Column 3, lines 53-61).

5. In a similar invention, Frey disclosed the concept of changing the point of view of a camera based on the positioning of the image seen by the camera. Frey discloses the camera collecting different frames of data corresponding to images of the user. The images are compared to the scene of the video clip, and the scene is then adjusted in any motion (for example, left, right, rotate, etc.) presented to the camera (See Page 4, lines 8-21 and FIG 1, 7, 8, 8D, 14a-b, 16). It should be noted that the pyramid like diagram in figure 14 that is used in changing the point of view of the scene is being viewed as the view frustum.

6. Frey disclosed a method for matching the images captured by the camera with a template of the facial portion of the user's head (See Page 15, lines 7-12, Fig 8d). As can be seen in Fig 8a-b, Frey also disclosed modifying the view so that a point of interest (for example, the point of interest in Fig 8a could be the road) appears at a constant position when displayed in successive video clips.

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Frey also disclosed the user head tracking concept to include a method of identifying a search region within the frame of the video clip and comparing values within the region to template values (See page 10 lines 4-25). For example, the search region in Frey's reference is recognized as the ten screen pixels. As can be seen in fig 8a-b, Frey teaches the virtual position of the head to be normal to the center point of the virtual window.

7. In regards to claims 46-58, Frey disclosed a tracking device and a display coupled to a computer that controls the positioning of items through operating system controls. Therefore, it would be obvious to one of ordinary skill in the art to combine Frey's reference with Oishi et al's reference in order to properly present a change in point of view when the user of a video game is a soldier type player in a sniper mode. The change in point of view in this scenario will be needed to simulate looking down the barrel. The motivation to combine the references comes from Frey Page 22 lines 15-18 where it states that those skilled in the art could modify the present invention with an algorithm that controls a scene view.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Konagai, Jp200259856a, discloses method of changing angle of view of a camera based on object positional information

Marks, US7071914b1, discloses method for interacting with graphic images

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Hoydal, US6546153b1, discloses method for image processing

Paul et al., US7121946b2, discloses method for real time head tracking for computer games and applications

Gutta et al., us6931596b2, discloses method for automatic display depending upon the viewers location\

Conclusion

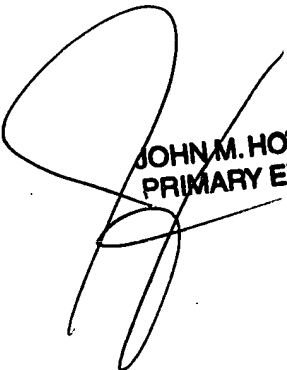
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Omotosho whose telephone number is 5712723106. The examiner can normally be reached on m-f 8-430.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hotaling can be reached on (571)272-4437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EO



JOHN M. HOTALING, II
PRIMARY EXAMINER